

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-8. (cancelled)

9. (currently amended) A method for adapting link weights in a communication network formed with links ~~for an optimized traffic distribution within the communication network in respect of a traffic volume expected for the communication network and in relation to a parameter relating to the link usage~~, the method comprising:

- a) assigning start values for the link weights to the links of the communication network;
- b) calculating paths for routing of traffic within the communication network on the basis of the link weights;
- c) determining the values of ~~the a~~ parameter for the links using the calculated paths and the expected traffic volume;
- d) determining such link for which the parameter has the highest value; and
- e) increasing the link weight for the determined link, ~~wherein and~~
- f) repeating the steps b), c), d) and e) are repeated until the value of the parameter for the determined link is higher than the parameter value for the determined link ~~relative to in~~ a preceding step d), ~~wherein~~  
~~the steps a) to f) are performed with the aid of a data processor.~~  
wherein the traffic distribution is optimized within the communication network for an expected traffic volume relating to the link usage.

10. (previously presented) The method in accordance with claim 9, wherein the parameter is produced by an absolute traffic load, a relative traffic load related to link bandwidth traffic-related costs arising for using the link, a link availability, a delay time of the relevant link, or the load capabilities of an end node of the relevant link.

11. (previously presented) The method in accordance with claim 9, wherein the start values for the link weights are the same for all links.

12. (previously presented) The method in accordance with claim 10, wherein the start values for the link weights are the same for all links.

13. (previously presented) The method in accordance with claim 9, wherein the paths are calculated using the OSPF (open shortest path first) protocol or the IS-IS (Intermediate System - Intermediate System) protocol.

14. (previously presented) The method in accordance with claim 10, wherein the paths are calculated using the OSPF (open shortest path first) protocol or the IS-IS (Intermediate System - Intermediate System) protocol.

15. (previously presented) The method in accordance with claim 11, wherein the paths are calculated using the OSPF (open shortest path first) protocol or the IS-IS (Intermediate System - Intermediate System) protocol.

16. (previously presented) The method in accordance with claim 9, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

17. (previously presented) The method in accordance with claim 10, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

18. (previously presented) The method in accordance with claim 11, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

19. (previously presented) The method in accordance with claim 13, wherein the paths calculated if the abort criterion f) is fulfilled are used for routing within the framework of the ECMP (Equal Cost Multi Path) concept.

20. (previously presented) The method in accordance with claim 9, wherein the link weights and their increase are always expressed by whole numbers.

21. (previously presented) The method in accordance with claim 10, wherein the link weights and their increase are always expressed by whole numbers.

22. (previously presented) The method in accordance with claim 11, wherein the link weights and their increase are always expressed by whole numbers.

23. (previously presented) The method in accordance with claim 9, wherein the link weight is increased for both , directions of transmission of the link for the link determined.

24. (previously presented) The method in accordance with claim 10, wherein the link weight is increased for both directions of transmission of the link for the link determined.

25. (previously presented) The method in accordance with claim 11, wherein the link weight is increased for both directions of transmission of the link for the link determined.

26. (previously presented) The method in accordance with claim 9, wherein the expected traffic volume is . described by the traffic matrix.

27. (previously presented) The method in accordance with claim 10, wherein the expected traffic volume is described by the traffic matrix.

28 (New) A computer program product for adapting link weights in a communication network formed with links embodied on a computer readable medium, the computer program product comprising:

- means for assigning start values for the link weights to the links of the communication network;

- means for calculating paths for routing of traffic within the communication network on the basis of the link weights;

- means for determining the values of a parameter for the links using the calculated paths and the expected traffic volume;

- means for determining such link for which the parameter has the highest value; and

- means for increasing the link weight for the determined link,

- wherein the calculation of paths for routing of traffic, the determination of values of a parameter for the links, the determination of such link for which the parameter has the highest value and the increasing the link weight for the determined link are repeated until the value of the parameter for the determined link is higher than the parameter value for the determined link in a preceding determination of such link for which the parameter has the highest value; and

- wherein the traffic distribution is optimized within the communication network for an expected traffic volume relating to the link usage.